



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029
March 20, 2009**

Ms. Alicia Williamson
T6-D32
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

RE: Draft Supplemental Environmental Impact Statement for the Combined License for North Anna Power Station Unit 3 ESP Site – NUREG- 1917.

Dear Ms. Williamson:

In accordance with Section 102(2) (C) of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2) (C), Section 309 of the Clean Air Act, 42 U.S.C. § 7609, and the Council on Environmental Quality (CEQ) regulations, 40 CFR Parts 1500-1508, the United States Environmental Protection Agency (EPA), has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the above referenced project. The Draft SEIS was prepared to assess the potential environmental impacts that would result from the construction and operation of an additional nuclear power unit (Unit 3) at the North Anna Power Station (NAPS).

On November 27, 2007 Dominion Nuclear North Anna LLC (project sponsor) was issued an Early Site Permit (ESP) by the NRC for the NAPS. The ESP gives approval of the suitability for the construction and operation at the NAPS for one or more new nuclear units. The environmental review of this action was documented in the Environmental Impact Statement for the Early Site Permit at the North Anna Site (ESP-EIS, published December 2006). The Draft SEIS provides for a subsequent environmental review related to the proposal by Dominion Nuclear North Anna LLC to construct and operate an Economic Simplified Boiling Water Reactor - Unit 3 with a total combined thermal power rating of 4500 megawatts at its NAPS in Louisa County, Virginia. The proposed unit would use a closed-cycle, combination dry and wet cooling tower system, with makeup water supplied by Lake Anna. The proposed project would also include the construction of a new 15 mile 500-kV transmission line on existing right of way to support the proposed Unit 3. The Draft SEIS references the ESP-EIS and provides for the environmental review of new and significant information.

EPA has reviewed the Draft SEIS. While EPA commends the applicant for its efforts to reduce the volume of discharge from Unit 3, EPA continues to have concerns regarding the thermal discharge from the proposed Unit 3 consistent with those expressed in our August 28, 2006 comments on the Supplemental Environmental Impact Statement for the Early Site Permit. As you know, the existing Units 1 and 2 have a thermal variance under Virginia's Pollution Discharge Elimination System (VPDES) permit. While the VPDES permit is protective of water quality, thermal discharges may decrease the level of dissolved oxygen in the water adding stress to the aquatic community. EPA has ecological concerns with the cumulative impacts to the lake




due to thermal discharge from the existing units, the proposed Unit 3 and the low dissolved oxygen levels from several lake tributaries. As a result, EPA believes that Dominion Nuclear North Anna LLC should consider additional mitigative measures to offset the potential thermal discharge impacts.

Primarily because of this concern, EPA has rated the Draft SEIS as “Environmental Concerns” (EC - 1) for its environmental impact. An EC rating means the review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. The numeric rating assesses the adequacy of the Environmental Impact Statement. The numeric 1 rating indicates that the Draft SEIS adequately sets forth the environmental impact(s) of the preferred alternative. A copy of our rating system is attached. 2

EPA appreciates the opportunity to submit comments on the Draft SEIS for the North Anna Project and would be pleased to discuss our concern regarding the project. Please feel free to contact me or Kevin Magerr at (215) 814-5724, if you wish to discuss our concerns further.

Sincerely,


Jeffrey Lapp, Associate Director
Office of Environmental Programs

Attachment: EPA Rating System Criteria





Environmental Impact Statement (EIS) Rating System Criteria

EPA has developed a set of criteria for rating draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft EIS.

- Rating the Environmental Impact of the Action
- Rating the Adequacy of the Draft Environmental Impact Statement (EIS)

RATING THE ENVIRONMENTAL IMPACT OF THE ACTION

- **LO (Lack of Objections)** The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- **EC (Environmental Concerns)** The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.
- **EO (Environmental Objections)** The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental Objections can include situations:
 1. *Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;*
 2. *Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;*
 3. *Where there is a violation of an EPA policy declaration;*
 4. *Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or*
 5. *Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.*
- **EU (Environmentally Unsatisfactory)** The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and



one or more of the following conditions:

1. *The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;*
2. *There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or*
3. *The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.*

RATING THE ADEQUACY OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)

- **1 (Adequate)** The draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- **2 (Insufficient Information)** The draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the final EIS.
- **3 (Inadequate)** The draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS.

